State of California AIR RESOURCES BOARD

EXECUTIVE ORDER A-21-204

Relating to Certification of New Heavy-Duty Motor Vehicle Engines
CUMMINS ENGINE COMPANY, INC.

Pursuant to the authority vested in the Air Resources Board by Sections 43100, 43102 and 43103 of the Health and Safety Code; and

Pursuant to the authority vested in the undersigned by Sections 39515 and 39516 of the Health and Safety Code and Executive Order G-45-9;

IT IS ORDERED AND RESOLVED: That the following Cummins Engine Company, Inc. 1998 model diesel engines are certified for use in motor vehicles with a manufacturer's gross vehicle weight rating (GVWR) over 14,000 pounds:

Fuel Type: Compressed Natural Gas or Liquid Natural Gas (CNG or LNG)

Engine Family	Liters	(Cubic Inches)	Exhaust Emission Control Systems and Special Features
WCEXH0505CAH (553C)	8.3	(505)	Charge Air Cooler Turbocharger Powertrain Control Module Heated Oxygen Sensor Oxidation Catalytic Converter

Engine models and codes are listed on attachments.

The following are the certification exhaust emission standards for this engine family in grams per brake-horsepower-hour:

Non-Methane Carbon Hydrocarbons Monoxide		Nitrogen <u>Oxides</u>	<u>Particulates</u>		
1.2	15.5	2.5	0.05		

The following are the certification exhaust emission values for this engine family in grams per brake-horsepower-hour:

Non-Methane Carbon <u>Hydrocarbons</u> <u>Monoxide</u>		Nitrogen <u>Oxides</u>	<u>Particulates</u>
0.5	1.0	2.2	0.02

BE IT FURTHER RESOLVED: That for the listed engine models, the manufacturer has submitted the materials to demonstrate certification compliance with the Board's emission control system warranty provisions (Title 13, California Code of Regulations, Section 2035 et seq.).

BE IT FURTHER RESOLVED: That the listed engine models are certified to the optional lower-emission NOx standards pursuant to the California Code of Regulations, Title 13, Section 1956.8(a)(l) and the incorporated "California Exhaust Emission Standards and Test Procedures for 1985 and Subsequent Model Heavy-Duty Diesel Engines and Vehicles", adopted April 8, 1985, as last amended June 29, 1995.

BE IT FURTHER RESLOVED: That the listed engine models are certified for use in urban buses.

Engines certified under this Executive Order must conform to all applicable California emission regulations.

The Bureau of Automotive Repair will be notified by copy of this order and attachments.

Executed at El Monte, California this _/

Aay of February 1998.

R. B. Summerfield, Chief Mobile Source Operations Division

Manufacturer: Cummins Engine Company

Process Code: New Submission

EPA Engine Family: WCEXH0505CAH

553C

Manufacturer Family Name:

4.Fuel Rate: 5.Fuel Rate: mm/stroke @ peak HP (lbs/hr) @ peak HP

9.Emission Control	Device Per SAE J1930	H2OS, PCM,OC TC, CAC			<u> </u>	1	
1.Engine Code 2.Engine Model (SAE Gross) (for diesel only) (SEA Gross) (10shr)@peak HP 6.Torque @ RPM mn/stroke@peak 8.Fuel Rate: 9.Emission Control (SEA Gross) (10shr)@peak torque Device Per SAE J1930		na		400 na na		Па	
7.Fuel Rate: mm/stroke@peak toroue		па				na	
6.Torque @ RPM (SEA Gross)		750 @ 1400			-	660 @ 1400	
5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)		na		กล	C C	กล	
4.Fuel Rate: mm/stroke @ peak HP (for diesel only)		na		na		000 BI	
3.BHP@RPM (SAE Gross)		275 @ 2400			250 (g) 2400		
2.Engine Model	C8.3-275G	FR 90304 CPL 2466 C8.3-250G		ED 00071		THE RESERVE THE PROPERTY OF TH	
1.Engine Code 2.Engine Model	CPL 2290	FR 90304 CPL 2466	FR 90270	ED 90271	1770011	Total Commence of the Commence	